

splendid Spotted Shag, *G. punctatus*, keeps entirely to the sea-shores; I observed it only in the fjord of the Thames, and the White-vented Shag (*G. leucogaster*) I saw only in the Bay of Islands. The Gulf of Hauraki, I may add, was swarming with *Sula serrata* and the interesting little *Pelecanoides urinatrix*.

Hoping to be able to give, on another occasion, a more complete account of my observations on New-Zealand birds, I conclude by offering my best compliments and thanks to all my ornithological friends in the colony through the pages of 'The Ibis.' These I know they will get in due time, as the ornithologists of New Zealand are all devoted readers of 'The Ibis.' My next letter will, I trust, be again from the tropics, either from the islands of Torres Strait, whither I am now bound, or, perhaps, if I am able to carry out my plans, from New Guinea itself!

Between Sydney and Thursday Island,
October 1881.

XXX.—*Ornithological Notes of a Journey through Syria, Mesopotamia, and Southern Armenia in 1881.* By H. B. TRISTRAM, F.R.S.

My expedition of last year was, as regards ornithology, the most barren I have yet made. My course lay, for the most part, over ground which has been again and again explored by naturalists. Palestine cannot now be expected to yield novelties: Northern Syria has few natural features which can differentiate its fauna from that of the Lebanon and Asia Minor. Scanty, indeed, must be the gleanings which Mr. Danford has left for any follower of his steps in Armenia; while the monotonous, treeless, and fertile plains of Mesopotamia afford no cover for any fugitives across the Tigris unnoticed by Mr. Blanford in Persia.

A few days of January spent in Egypt could not add much to our ornithological knowledge. One fact, however, forced itself most painfully on my notice—the startling absence of once familiar forms on the banks of the Nile. The Spoonbills, Avocets, and other Waders, of which I have, in days

past, made a goodly bag within a walk of Boulac, were no longer to be seen. I ascended the river by one of the new steamers, and from its deck, for a whole day, I saw scarce any thing better worth notice than a Hooded Crow or a Buff-backed Heron.

One piece of Egyptian antique art I must mention here, for it conveys a very interesting bit of ornithological history, which I have not seen noticed, though doubtless it is familiar to many readers of 'The Ibis.' In the museum at Boulac is a very fine fresco from a tomb of the Hyksos period, pronounced both by Loftus and by the late Marietta Bey to be the oldest existing painting in the world. This fresco represents six wild Geese in a line, life-size. The first, second, third, and sixth figures are those of a White-fronted Goose in different attitudes, most accurately painted; but the fourth and fifth figures are of the Red-breasted Goose of Siberia. How comes it here? We cannot help recalling how a like distinguished honour has been accorded to the Red-breasted Goose, depicted on the same canvas with the White Dodo of Bourbon in the painting now at Carisbrook Castle, reproduced by Prof. Newton in the *Trans. Zool. Soc.* (vol. vi. p. 373). But how does it happen that this bird is one of the earliest known subjects of Egyptian art, painted there more than 4000 years ago? Was it then a very rare straggler, which some fortunate fowler had caught, and which attracted notice by its rarity, or was it a bird then well known, but which has since become extinct in its whilom winter quarters? In the latter case, as it could never have been more than a winter visitor, this fresco may indicate a former westward extension of the summer range of this now exclusively Eastern Siberian bird.

From Cairo to Ismailia, and from Ismailia by the canal to Port Said, we saw nothing. But around the latter place, though itself the abomination of desolation, birds are still abundant, though my only souvenir is an Avocet; and the Ducks on the Damietta lakes seemed as numerous as ever, although they were very needlessly most anxious to avoid too close a recognition.

Arrived in Palestine, missions, antiquities, and topography elbowed out ornithology; for, save in rare instances, to be noticed hereafter, we saw none but old familiar forms. Some few additions to our lists we made, for the most part of species which it might be taken for granted were certain to be found.

Passing at once to the south, we found between Gaza and Beersheba the Crane (*Grus cinerea*), faithful to the same winter-quarters, and standing sentry on the same rocks on which I met him twenty years ago, returning towards evening in long wedge-shaped flocks, which, whooping and circling in indignation over our heads, declined to settle until they had watched and warned us at least a mile or two off their premises. Their warning-note seemed well understood by others; for I never saw more gazelles, jackals, and foxes started from unlikely coverts than these Cranes roused and scared as they swooped, Lapwing-like, provokingly in front of us. The Crane must be an early migrant, for I never noticed one after February.

It was not until the beginning of April that we noticed the vernal northward migration to any extent, although from the end of February seldom a day passed without our seeing some additional species in small numbers wending its way to the north. *Hirundo rustica* was to be seen occasionally every day in February on the lower plains, chiefly near the sea. The first Swifts (*Cypselus apus*) appeared over the heights of Moab at Medeba on 27th February; but they were few. Next the Alpine Swift (*C. melba*) arrived in flocks over the same plains. They were darting overhead till sunset. The following day they had all disappeared, and I never saw one again till we found them in their breeding-haunts further north. On the 7th March arrived the main body of the Common Swifts, overspreading the whole district, and remaining for nidification. They would seem to be nearly the most abundant of all the birds of the land during the period of their sojourn, and are content with meaner accommodation than they claim in England. A low ruined wall or the chinks of an old cistern are not despised by them. *Emberiza cæsia* over-

spread the hilly regions in scattered pairs, seldom many together, on 19th March. But we never noticed the Ortolan until the 5th April, when it covered the country, plain and hill alike, in small flocks, restless and wild, in numbers far exceeding those of its congener; nor did the Ortolan pair till a fortnight later, when *E. cæsia* was already sitting. Later still came the Meadow-Bunting (*E. cia*), which I noted for the first time on 28th April. But this bird I have never found breeding, except in the mountains, while the Ortolan haunts the oliveyards and cultivated lands, and *E. cæsia* affects only the scrubby and rocky hill-sides. Long after these arrived the black-headed *Euspiza melanocephala*, on the 7th May, when it, in its turn, appeared to be the most abundant of its genus, and to be making itself at home in any variety of terrain.

The Stork kept its appointed time, and stalked solemnly over the plains from the 10th April. I never saw one after the 22nd April. Up to that date there was a constant succession of arrivals from the south and departures for the north. The most wonderful flight of Storks was one which passed over us in the plain of the Upper Jordan on 19th April, steering due north, in the long V-like wedges with which we are so familiar in the flight of wild Geese. Party after party passed, perpetually changing their leader, and the hindmost of the longest limb frequently crossing over to take the rear of the other limb; but never, countless though their numbers were, did they fly in a mass, or in any other order than that of the wedge.

On the 16th April the House-Martin, a much later arrival than most of its congeners, passed northwards in flocks of many thousands; and the same day a vast cloud of Swifts (*C. apus*), quite apart from those which had already overspread the land, dashed in the same direction up the valleys between the Lebanon and Antilebanon. One or two birds which I have mentioned rather doubtfully in previous papers occurred to us very abundantly in this expedition. Among these I may mention *Lanius minor*, which I obtained once in 1858, but never saw in 1863, 1864, or 1872. This year it

was very common, though it did not return until the middle of May, while the pretty and lively little Nubian Shrike (*L. personatus*) made its appearance on the 11th April. I also satisfied myself of the identity of the Mountain-Finch, *Montifringilla nivalis*, with the western alpine species, and found it in the beginning of April on the lower grounds near the source of the Jordan. During my visit in 1863-64 we never secured a specimen of the Collared Flycatcher (*Muscicapa collaris*), though I felt sure I saw it on one occasion. This year I only once saw my familiar old friend *M. luctuosa*, while from the 16th April *M. collaris* attracted us everywhere, and on every different sort of ground. Its coming was sudden, its diffusion general. We had been riding across country for several days, up and down mountain-glens, taking a short cut from Tyre to Mount Hermon. Habitations were few, birds abundant. The Warblers had greeted us on all sides as we crossed the Galilæan hills; but not a Flycatcher did we see till, on the morning of the 16th April, crossing from the stupendous gorge of the Leontes to the head of the Jordan valley, and thence up the woodlands to the Baniyas, a bright little black-and-white bird, conspicuous among the foliage, started from almost every other tree, and often from the scanty scrub. We had been traversing similar ground the preceding day, and not one had we seen. But what struck me most was the general diffusion of the Flycatchers over a wide area without their being gregarious. I think I scarcely ever saw even a male and female together. Yet the whole land was overspread with them. And this continued as we travelled eastward and southward up to the 29th April. Everywhere the male bird was seen; but they certainly were not paired. Afterwards I only met with here and there an isolated couple engaged in domestic duties in Armenia. Now I had been over the very same ground during the same fortnight of the year in 1864, and never detected *M. collaris*; yet in the same country I did obtain *M. luctuosa*, both on migration at this date and afterwards breeding. Had the bird been in Palestine in 1864 I can hardly conceive how it could have escaped the notice of four keen and active naturalists. The Collared

Flycatcher must be somewhat fitful and uncertain in its migrations ; and this is a point on which the observations of future travellers may throw some light.

I was much interested by coming across a large flock of Great Spotted Cuckoo on migration on 22nd April. Not for the first time, for I see I noted a large flock roosting one night close to my camp in the Jordan valley the 5th April, 1872. Unlike *Cuculus canorus*, *Oxylophus glandarius* migrates sociably in large bands. They travelled very leisurely, and while scattered along the whole length of the valley which they were crossing, kept up ceaseless conversation, some few jerking their tails on the edge of the cliffs, while the greater number pursued their course among the bushes, searching for food as they descended our side of the valley and climbed the opposite face. Their behaviour, but for their noisy tongues, was very like that of a well-ordered flock of Rooks, with their sentries on their feeding-ground. When they had reached the north ridge of the valley, they seemed to take stock of the situation, and very soon rose in the air, perhaps stimulated by our ineffective shots, and pursued their course till out of sight.

Another bird I was able to notice on its breeding-haunts more closely than I had hitherto done. This was my *Calandrella hermonensis*, which several critics have pronounced to be only a large form of *C. brachydactyla*. Apart from the fact that the haunts of the latter are invariably the plains, while the other is found only on the rocky heights, the flight is quite different, and it would be impossible for any one who had been once introduced to both species in their own homes to confuse them. *C. hermonensis* has a habit of perching on the edge of a rock or on the top of a small boulder, and uttering an oft-repeated, rather plaintive, but very clear note, utterly unlike that of the Short-toed Lark, and something like that of an exceptionally musical Yellowhammer. It also is a solitary, and not a gregarious bird, and when it rises, though it has much of the soaring character of the Sky-Lark, it does not attempt a sustained song.

The only additions I have to make to my former Palestine lists are *Saxicola morio*, Hempr. & Ehr. (*S. leucomela*, Pall.),

which, curiously enough, I never saw, or overlooked, in former years, but which was found by Hemprich and Ehrenberg, and since their days in some plenty in Cyprus by Lord Lilford. I met with it frequently in the north of Palestine, but apparently on migration, though I think there can be no doubt that it breeds on the Syrian highlands. I also obtained near Beyrout the Golderest, *Regulus cristatus*, and the Great Snipe, *Gallinago major*. I saw also a specimen of the Bearded Tit (*Panurus biarmicus*), which had been shot in some reeds near Beyrout on November 18th by Dr. Van Dyck. These four are the only absolute additions I have to make to our fauna.

I may also note that the only specimen of the Cream-coloured Courser which I obtained is very different in hue from any others I have ever seen, being of a much deeper and richer colour. There is no other distinction which I can detect. In measurements it exactly corresponds with a dozen other specimens in my collection.

The Francolin appears to have now a wider range in Palestine than has hitherto been ascribed to it, and we several times put it up in places where, had it existed eighteen years ago, I could not have missed it. In the dry thickets of the Lower Jordan valley, on the east side, we often heard four or five males uttering their challenge soon after dawn, and succeeded in flushing them from the brushwood. They were also plentiful near the springs of the Jordan, at Tell Kadi, where, though one of our best nesting-grounds in 1864, we had never found them. In fact there were few patches of stunted scrub in the plains, wet or dry, where the Francolin was not heard. In Syria, north of the Lebanon, it is spread over the whole lowlands, affecting especially the myrtle-thickets. Though, alas! extinct in Europe, it would seem to be on the increase throughout Syria, while in Cyprus, according to common report, the annexation to England has sealed its doom.

When, in the early part of May, I crossed the Lebanon and journeyed up the coast, and then across the Ansairiyeh Mountains into the Syrian plain, I had a good opportunity of noticing how very sharp is the line of demarcation between several closely allied species. It is well known that deserts

and mountain-ranges form barriers far more definite than a much greater expanse of water; but it is remarkable that a range like Lebanon, rarely reaching an altitude of 10,000 feet, should prove a sharp dividing-line which certain species never cross, though the climatic and other conditions are identical on both sides of the line.

For instance, no Warbler is more conspicuous or abundant in the whole of Palestine than *Sylvia galactodes*, the Rufous Warbler. After the last week in April it is to be seen everywhere on upland and lowland alike, expanding, jerking, and fanning its tail, with its conspicuous white bar, on the bare fig-trees, among olives, on the top of any little shrub, or on the pathway in front of the horseman, hopping fearlessly on at his close approach. No specimen of its ally (*S. familiaris*) have I ever noticed among the thousands I have seen, though I was keenly on the look out for it. But when, after leaving Beyrout, I followed the coast-line northwards, so soon as we had passed the headlands of Lebanon and entered the rich plain of Tripolis, not a solitary *S. galactodes* was ever seen, while *S. familiaris* was as abundant everywhere as its congener had been in the south. During the whole of my journey through Syria, across the Euphrates, then up to the Tamid and through Armenia and Cilicia, I never for an hour lost sight of *S. familiaris*, most appropriately so-named. Never once did I see *S. galactodes*. North and east we have the one species; south and west, as far as Algeria, Spain, and Morocco we find the other. Yet *S. familiaris*, in returning from its winter-quarters, must pass through Palestine in order to reach its own summer retreats. If the respective ranges were as Mr. Seebohm puts them in his admirable Brit. Mus. Catalogue, there would be less difficulty; but he has omitted Palestine from the breeding-quarters of *S. galactodes*, though he enumerates my specimens taken while breeding, and he states that *S. familiaris* breeds in Palestine. This would certainly simplify matters if it only did so. But it does not.

Another curious proximity of closely allied species I noted in the case of the two Rock-Nuthatches. The larger form,

Sitta syriaca, has never been found in Syria; but under the red-tapeism of the commentators on the Brit. Assoc. Rules it retains the name ("lucus a non lucendo"), while the smaller form, *S. neumeyeri* is found throughout all the mountainous parts of Galilee and Syria. But when, after crossing the Syrian plains, we begin to ascend the southern spurs of the Tamid range, here and throughout Armenia we find the large species, *S. syriaca*, the specimens equalling the very largest from Turkestan. So far, however, from supplanting its lesser relative, *S. neumeyeri* appears to be, throughout Southern Armenia, more numerous than in Syria, and that side by side with the larger species. I have shot a pair of each on the same rock at the same time. I admit them to be distinct races, but grudge specific distinction to mere size, especially when, as here, I could detect no differences in the voice.

Another bird which seems to have its boundaries defined by a very sharp line is the Magpie (*Pica rustica*). Though abundant in Cyprus, it is never seen in Syria, either north or south of the Lebanon; but about a day's ride north of Aleppo, on the borders of Armenia, just as we begin to ascend the lower Tamid range, it appears haunting the white poplars which fringe the streams, and is spread in small numbers throughout Armenia. Why it should avoid the Syrian plains and decline to leave the southern slopes of the Tamid is difficult to understand. Russell gives it in his list of the birds of Aleppo; but as its range is still so close to that city that Dr. Russell may have often seen it, I do not see any ground for supposing that it has retreated north within the last century and a half.

But the most interesting ornithological sight I was privileged to enjoy in Syria was the Rose-coloured Pastor on migration. On May 26th I was on the ruins of Kelat Seijar, the ancient Larissa, a romantic and isolated fortress on the banks of the Orontes. The river flows due west towards it down a deep glen, with cliffs of great height on the south, but lower on the north. The country on both sides is a vast plain, but generally higher on the left than on the right bank of the Orontes. Just at this spot a bold spur of rock runs

from south to north, abruptly terminating in a bluff. For the last two miles the promontory is not over 200 yards wide. The river meets this wall of rock at right angles, and dashing against it, suddenly turns due north and flows through a magnificent fissure till it reaches the end of the bluff, when it turns as sharply again, rounds it, and pursues its westward course. Along this ridge was perched the citadel of Larissa. Strong and almost inaccessible as it is by nature, Seleucus still further strengthened it by cutting a huge fosse, 300 feet deep, exactly opposite the spot where the river strikes the cliff, but the bottom of the fosse is still several hundred feet above the stream. In fact one might imagine that the Syrian king had some idea of making a channel for the river at this point, the huge trench being exactly in a line with that worked out by the water. We were standing on the top of the massive battlements which overhang the fosse, enjoying such a variety of bird-life as one can seldom watch in such a narrow space. The battlement on which we lay was, perhaps, 60 feet above the gorge, and our presence was quite ignored by the busy throng below us. Some dozen pairs of Lesser Kestrel (*Tinnunculus cenchris*) were disporting themselves in front of their inaccessible nesting-places, or hovering, apparently motionless, in mid air a hundred feet beneath us. A busy flock of Bee-eaters (*Merops apiaster*), which had burrowed out their nests in a bank round the corner, poised themselves, rose and fell, suddenly perched on the cliff-side, and, after a moment's pause, darted out again, practising the evolutions of Kestrel, Swallow, and Flycatcher by turns. Softly and silently a few pairs of Rock-Swallows (*Hirundo rupestris*) stole backwards and forwards, skimming past the hovering Kestrel with perfect indifference. A pair of Wall-creepers were gliding along the opposite face of the fosse, zigzaging up and down with wings partially open and apparently motionless. Rollers by the dozen were screaming, tumbling, and darting up and down the narrow fissure, chasing with dissonant shrieks a few Jackdaws, who were evidently tabooed by every one else, but who resented their ostracism. On a sudden, with a whiz and a sound of wings almost deafening for a moment, a dark

cloud dashed from the river's channel through the opening, and immediately deployed in the plain to the west. At first, as they approached, they might have been taken for the Common Starling; but when we looked down on the rosy backs flashing beneath us, it was plain enough that we had come on a migration of the Pastor. Hardly had this flight passed, when, turning our eyes up the river, we saw another cloud gliding, like a balloon, just over the ravine of the Orontes towards us. About a quarter of a mile above us was a small islet in the centre of the stream, of perhaps a quarter of an acre in extent. It was covered with rich long grass. The balloon hovered over it for a moment, then rapidly expanded into the shape of an inverted parachute, then flattened out, then became a spiral column, then, like a water-spout, dropped on the islet, which, in less time than it takes to write it, was suddenly transformed from a green oasis to a black patch. Not a trace of green could be seen; the whole was simply a mass of birds, so closely packed that the rose-colour was invisible—the black of heads and wings had absorbed all else. After remaining here a few minutes, as if to take breath, the mass suddenly rose and dashed in a long line through the fosse. They took about a minute to pass. I fired once at random (there was no need to choose a thick place), and an hour afterwards I picked up five dead birds, all of them in full plumage. We waited for some time, as flight after flight, in rapid succession, passed down the river's channel, often in strange forms—wreaths, balloons, columns—deploying into long lines, never leaving the river's course, but generally high in the air above it. But all of them as they approached this cutting dropped from their aerial height, and leaving the tortuous stream, struck right through the cleft far below us. The plain westward is uninterrupted, and here they at once spread themselves out, and, after skimming very near the ground, at length alighted, probably in quest of locusts.

From Kelat Seijar we pursued for two days a north-easterly course over the Syrian plain, and through the whole journey flock after flock of Pastors passed us, all pursuing a due west route. At one place we came suddenly, after mounting a gentle

ascent, on the crater of an extinct volcano, full of water and surrounded with basalt boulders. As we came up, one of these flights, which had alighted to drink, rose in alarm and darkened the air overhead. About a dozen fell to a random shot, and every one I picked up was in full breeding-plumage. At another place a solitary tree over a well was so covered with them that the colour of the tree changed from black to green as we approached. Once we came on a patch of some acres which had recently been visited by locusts. The old locusts were gone, but the young, not more than a quarter of an inch long, made the ground literally alive. They rose at every step of our horses like sand-lice on the sea-shore from a piece of seaweed left by the tide. Just after we had passed through this patch of devastating flight, I turned my head and saw a great globe in the air. It suddenly turned, expanded, and like a vast fan descended to the ground. We waited a few minutes, and saw acres covered with a moving black mass, dappled with pink. In a short time the mass became restless, and we rode back. The birds rose quietly, but not till we were close on them, and only those within dangerous distance. But not a young locust could we see. The Pastor had well earned its name of the "Locust-bird," and one batch of foes to man and his labour had been promptly and for ever exterminated.

After these three days I never again saw a Pastor. The natives all declared their visits to be most uncertain and occasional. They assured me they had not seen one for three years, though they always look and hope for them in locust-years, which these last had been. They always come from the east and go to the west. They never saw them return, nor did they ever hear of their breeding here. Throughout Syria the bird is everywhere familiar by name, but nowhere is it known to sojourn; nor was I able to ascertain whether its migration is always at the same season. When and where do they breed? Among the hundreds of thousands which crossed our path I did not detect one in young plumage; and therefore they could not yet have bred, although it was near the end of May—unless, indeed, they had left their

broods in India, and taken their summer holiday free from family cares. As it is, their behaviour reminds one very much of the erratic customs of the Waxwing. I ought to have mentioned that these amazing flocks keep up an incessant chatter, a deafening babble, not so much overpowering by its volume of sound, as implying a myriad of voices, "the voice of many waters," not, so far as I could judge, to be distinguished from the notes of a great swarm of Starlings.

From Aintab I struck down to the Euphrates at Birejik, where Mr. Danford had promised me a rich treat in the opportunity of studying the Bald Ibis (*Comatibis comata*); nor was I disappointed. The shores of the Euphrates, so far as I have seen them, are, for the most part, bare and uninteresting. Trees and birds are alike scarce. Gulls flit up and down; but I never could identify the species, though among them the large *Larus ichthyaetus* must have been one. There are many Waders; but of course these are all of familiar species—Redshank, Green Sandpiper, Kentish Plover, and especially the Pratincole, being the most abundant. The neighbourhood of Birejik, however, is exceptionally good ground for the ornithologist. Though the right bank on the Syrian side slopes down almost insensibly from the plain, the river is fenced on the Mesopotamian side by a long range of bold and lofty cliffs. On them is perched the town of Birejik, where the cliffs leave but a narrow strip of low-lying land by the river-bank. Above and below the cliffs recede, and the little plain is well-wooded and carefully cultivated. Here, on both sides, is abundance of bird-life. The telegraph-line to Teheran here crosses the Euphrates, and the Bee-eaters prefer its wires to any other perch. I was delighted to find here, for the first time in any numbers, a colony of the Persian Bee-eater (*Merops persicus*), not so numerous as *M. apiaster*, but still plentiful. The habits of the two species are markedly different when seen together. *M. persicus* is by no means shy, and perches much more frequently than the other, settling on low trees, and frequently on the top of a thistle-tuft.

While waiting for the ferry-boat, as the shades of evening

were coming on, long lines of a large black bird, like Ravens in the distance, began to pass over us, flying low and heavily to the other side of the river. As they approached, frequently within a few feet of our heads, we recognized them at once as the great Bald Ibis, *Comatibis comata*, whose acquaintance I had only made once in my life before, in the Sahara. Noble fellows they looked, as their long red bills outstretched and their red legs and feet contrasted with their resplendent black plumage, lazily flapping their wings as they sailed, rather than flew, noiselessly over us. We might have brought down as many as we pleased, but were warned by the bystanders that the birds were sacred, and that it would be a crime to kill one. I had no wish to get into trouble on my first entrance into Mesopotamia, and so bided my time. The birds congregated on the other side of the water, exactly after the manner of Rooks, some among the houses, many on the old castle, and more along the cliffs higher up.

Our quarters at Birejik were at a schoolmaster's house (a native Christian), high up in the town, and just under a cliff inhabited by a colony of Ibises. Next morning the birds all disappeared at daybreak, and the rookery was apparently deserted till sunset. Not really so, for I discovered that many young birds were still in their nests, though all were hatched, and we were too late (8th June) for eggs. The inhabitants of Birejik are chiefly Moslem, and believe that the Ibises contain the souls of the departed saints. It is consequently a crime to kill them, and their nests, though easily accessible, are never disturbed. My host, however, told me he could put me in the way of obtaining specimens. Accordingly, in the afternoon, a young man called to inform me he could take me a little before sunset to a spot where I could secure as many as I wished without being seen. We started forth, and armed with a permit to visit the ruined Saracenic castle, we were passed through the gate of the citadel, which is under the cliff on which the old fortress is perched; and passing through it, we stationed ourselves unobserved in a recess, away from the town, just under a ledge, which is one of the favourite roosting-places of the holy bird.

Here we could see them as they quietly sailed home at sunset. I secured five specimens, which dropped at my feet in quiet succession. The noise disturbed the young ones above, and seeing a head and neck projected over the cliff above, I was fortunate enough to hit it ; but it fell back out of sight, and I gave up my prey as lost. In a minute or two, however, it must have rolled over in the death struggle, for it fell dead at my feet. The bird was fully fledged, and quite able to fly, having scarcely any trace of the nesting-plumage ; but instead of the large bony protuberance at the back of the skull and the bare red skin, the base of the skull presented no peculiar development, and the whole head was covered to the base of the bill with thick short feathers, mottled black and white. I afterwards saw some younger nestlings looking out over the ledge, and others pacing backwards and forwards, as though preparing to try their pinions. The nests of the birds seemed to be a handful of twigs and straws placed close to the back of the rock, and the birds sit almost as close as sea-fowl on a ledge at Flambro' Head. Our discharges had had no effect in scaring away the rapid arrivals ; and as I already had more on hand than I could accomplish, after waiting till it was nearly dark, we packed up our six prizes in a large Arab cloak, which my companion threw over his shoulder, so as to conceal the contents, and took our departure, I following my guide at a cautious distance, so as to avoid exciting the suspicion that my gun had any connexion with his burden. The heat was so intense, the thermometer 96° in the shade, that I had to work throughout the greater part of the night in the yard of the house in order to preserve the specimens ; and I have no desire ever again to skin six Ibises after a hard day's work, by lamplight, in a temperature of near 100° .

The people assured me that these birds only come for the breeding-season, and are never seen during the rest of the year, not even a straggler remaining ; and this is the only breeding-place I could hear of during my travels, nor did I ever see a Bald Ibis on the Euphrates or away from it, except in the environs of Birejik. Considering that it breeds only on the Mesopotamian side of the river, I am at a loss to under-

stand its claim to appear in Dresser's 'Birds of Europe,' except that my friend thought it a pity that it should be left any longer without a memoir.

Elsewhere on the Euphrates I frequently started the Black Stork, which seems a very solitary bird, as I never put up two together. I know few more attractive sights than a Black Stork suddenly rising from a mud-bank in front, and then working his legs behind him as a rudder, while he circles round you till he has got well overhead, so as to take stock of the intruder from a safe distance.

At Carchemish, in the great Hittite mound, the employés of the British Museum have been making sundry excavations. These have been only moderately prolific, the chief objects of interest, and the Hittite slabs, having been found, not in the mound, but under the Greek city of Hierapolis below. But their labours have not been lost on the Bee-eaters, who have found the sides of the shafts most convenient for nesting, the débris being soft and easily penetrated. Both species, *M. apiaster* and *M. persicus*, were breeding here in colonies in the same shafts. But the moment they quitted the mound they held no further intercourse. *M. apiaster* hunted high in mid air, or hovered over the river and took flights beyond it. Its congener at once betook himself less adventurously to the plain and ruins beneath, and there skimmed close to the surface, perching continually on the stones which strew the site of the ancient metropolis.

When from Mesopotamia we turned north and, crossing the Euphrates at Samosait, entered Southern Armenia, we were at once surrounded by a very different fauna and flora from that which we had left. Instead of the yellow rose of North Syria, or the powerfully scented white rose of the Euphrates, we were in the home of the sweetbriar. Instead of the Isabel Wheatear (*Saxicola isabellina*), which, with the Calandra and Short-toed Larks, was almost the only winged denizen of the plains, where it is in amazing numbers, every turn, every clump of trees now introduced to us some old or new feathered friend. Not that I saw one which has not been commented on or reported by Mr. Danford; but there

are few mentioned by him which I did not see. I have seldom come across a richer piece of collecting-ground than the wooded mountain-track between Beshni and Nadjar. In places where we followed the course of a little rocky stream in a winding woody dell, the variety of bird-life was bewildering. Here, and here alone, I obtained *Emberiza cinerea*, which must be a most local bird. I found it feeding in small companies, probably broods, in little patches of marshy grass, and then concealing itself in the thick scrub. Here, too, were the large and small forms of Rock-Nuthatch together. The charming Robin-Chat (*Cossypha gutturalis*) had not ceased to sing, and was most abundant, but only where trees and rocks intermingled. The cedars were everywhere tenanted with little bands of *Parus lugubris*, and *Picus medius* occasionally showed himself. Both Magpie and Jay could be seen and heard, the latter especially numerous. I cannot conceive a field better likely than this to reward an oologist earlier in the season. Every Warbler, Redstart, and Bunting of Eastern Europe seemed to abound; and I should have been well content, had time permitted, to have stayed some days on these mountain-sides. We were about 7000 feet above the sea-level.

I must not conclude without alluding to one discovery, which I have already brought before the Zoological Society*, viz. the breeding-colonies of *Plotus leuallanti* and *Phalacrocorax pygmaeus* in the Lake of Antioch, in Northern Syria. The lake, which is many miles in extent, is very shallow, swarming with eels, which appear to form the staple of the diet of the inhabitants of Antioch. On the northern side of the lake are thousands of small islets, with only a few feet of water between them, so that one can wade easily from one to the other. Here the Snake-bird, Little Cormorant, and Common Tern (*Sterna hirundo*) have their common breeding-ground. The islets are covered with very coarse grass, not reeds, and a sort of low marsh-myrtle. For its nest the *Plotus* merely seems to tread down a tuft of coarse grass or rushes, or to settle down the centre of a little bush, much after the fashion of a Coot, but not so neatly. Wherever

* Cf. P. Z. S. 1881, p. 826.

there is a stick on which it can perch it may always be seen, looking, I presume, after the eels. It is a very late breeder, not hatching till the beginning of June. The nests are, for the most part, very close together; and as soon as the young can fly the whole colony suddenly disappears, and is not seen again till the next spring, arriving, so far as I could learn, a little later than the Cormorants, at the end of April. I was surprised to find the Common Tern breeding in these lakes, and no trace whatever of the White-winged Black Tern, so common on the coast, and of the Whiskered Tern, which would certainly be found in such localities in Algeria or Tunis.

I fear these notes must have exercised the patience of those readers who have got so far as this. But I crave their indulgence, reminding them that, however absorbing the interest, historical and archæological, of these regions, they are neither fresh fields nor pastures new to the naturalist, though even here the nesting-places of the Bald Ibis and the Darter may afford some inducement to younger and more energetic travellers to follow in our steps and make amends for our deficiencies.

XXXI.—*Further Notes on the Ornithology of Siberia.*

By HENRY SEEBOHM.

SINCE my last notes on the ornithology of Siberia (Ibis, 1880, p. 179) I have received three small collections of birds from that country, two from my collector in Krasnoyarsk, Mr. Kibort, and one from Samarcand, the latter sent me by Dr. Staudinger, of Dresden. Among the examples contained in these collections are some of unusual interest.

FALCO BABYLONICUS.

A fine example of Gurney's Falcon from Samarcand is dated 5th March.

FALCO SUBBUTEO.

Mr. Kibort has sent me an adult male Hobby and bird of the year from Krasnoyarsk.